National Institute of Environmental Health Sciences

Emphasizing the ecology in parasite community ecology

Author(s): Pedersen AB, Fenton A
Year: 2007
Journal: Trends in Ecology & Evolution. 22 (3): 133-139

Abstract:

In natural systems, individuals are often co-infected by many species of parasites. However, the significance of interactions between species and the processes that shape within-host parasite communities remain unclear. Studies of parasite community ecology are often descriptive, focusing on patterns of parasite abundance across host populations rather than on the mechanisms that underlie interactions within a host. These within-host interactions are crucial for determining the fitness and transmissibility of co-infecting parasite species. Here, we highlight how techniques from community ecology can be used to restructure the approaches used to study parasite communities. We discuss insights offered by this mechanistic approach that will be crucial for predicting the impact on wildlife and human health of disease control measures, climate change or novel parasite species introductions.

Source: http://dx.doi.org/10.1016/j.tree.2006.11.005

Resource Description

Exposure : ☑

weather or climate related pathway by which climate change affects health

Ecosystem Changes

Geographic Feature: ☑

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☑

resource focuses on specific location

Global or Unspecified

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: General Infectious Disease

Model/Methodology: ☑

type of model used or methodology development is a focus of resource

Methodology

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified